

PROJECT NUMBER: 1708
PROJECT TITLE: Physical Chemistry and Process Monitoring
PROJECT LEADER: J. L. Banyasz
PERIOD COVERED: January, 1989

I. OPERATIONS SUPPORT (J. Crump and A. Closter, in collaboration with the Applied Technology Group)

- A. Objective: Determine the effect of particle size distribution on dynamic viscosity changes that occur in PVA tipping adhesives.
- B. Results: The roller speed test at Stockton Street, as reported last month, was continued. The results to date are in accordance with the predictions based on simulator data from the laboratory which indicate that reducing roller idling speed reduces the rate of viscosity increase in the glue pot.
- C. Plans: The roller speed study at Stockton Street will be completed.

II. OPERATIONS SUPPORT (P. Henderson, in collaboration with the Applied Technology Group)

- A. Objective: Characterization of inks.
- B. Results: The operating parameter of current tax stamp inks with regard to color, viscosity, and set-off have been established and specifications established. Vendors have been requested to furnish water or alcohol based inks meeting these specifications. The work on establishing the operating window of currently used monogram inks continues.
- C. Plans: The characterization of monogram inks will continue. New tax stamp inks will be tested as they become available.

III. LOW DENSITY RODS (S. Ganeriwala)

- A. Objective: Compare compression properties of low density and control rods.
- B. Results: Compression measurements on low density and control rods as a function of RH have been initiated.